

WE CLAIM:

1. A system for routing both toll-free and caller-paid telephone calls comprising:

5 a call service having at least two call service centers;

an interexchange network for handling toll-free telephone calls directed to the call service;

a local exchange network for handling caller-paid telephone calls directed to the call service; and

10 a call routing processor in communication with the call service centers, the interexchange network, and the local exchange network, wherein the call routing processor is configured to receive status messages from the call service centers and provide routing instructions to both the interexchange network and the local exchange network, and wherein the toll-free and caller-paid telephone calls to the call service originating at the interexchange network and the local exchange network

15 are routed to an appropriate service center.

2. The system of claim 1, wherein the local exchange network comprises an advanced intelligent network.

3. The system of claim 1, wherein the call routing processor further comprises common call routing scripts for routing telephone calls received from the interexchange network and the local exchange network.

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4. The system of claim 2, wherein the advanced intelligent network comprises at least one service control point (SCP) in communication with the call routing processor over a data channel.

5. The system of claim 4, wherein the SCP further comprises a call routing processor interface in communication with the call routing processor over the data channel.

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6. The system of claim 5 further comprising an intelligent peripheral in communication with a switch via a data channel and a voice/information channel.

7. A system for routing both toll-free and caller-paid telephone calls, the system comprising:

5 a call service having a plurality of call service centers
an interexchange network for handling toll-free telephone calls directed
to the call service;
a local exchange network for handling caller-paid telephone calls
directed to the call service, the local exchange network having a call controller, and
a call routing processor in communication with the call service centers,
the interexchange network, and the local exchange network, the call routing
10 processor configured to receive status messages from the call service centers and
provide routing instructions to the interexchange network and the local exchange
network, wherein the call controller comprises a call routing processor interface
having communication logic for communicating with the call routing processor.

15 8. The system of claim 7, wherein the call routing processor interface
further comprises default instruction logic for routing a caller-paid telephone call to a
call service center in an absence of routing instructions from the call routing
processor.

20 9. The system of claim 7, wherein the call routing processor interface
further comprises service logic responsive to caller-paid telephone calls directed to a
particular call service and capable of performing predetermined functions on the
caller-paid telephone call.

25 10. The system of claim 7, wherein the communication logic for
communicating with the call routing processor comprises a routing query message
format, the routing query message format having information on a telephone number
of a calling party of a caller-paid telephone call.

30 11. The system of claim 10, wherein the information on the telephone
number of the calling party comprises an area code of the calling party, wherein the
telephone number of the calling party is not shown to a called party.

12. The system of claim 10, wherein the information on the telephone number of the calling party comprises an area code and a prefix of the telephone number of the calling party, wherein the telephone number of the calling party is not shown to a called party.

13. The system of claim 10, wherein the information on the telephone number of the calling party comprises a presentation restriction indicator, wherein the telephone number of the calling party is not shown to a called party.

14. The system of claim 10, wherein the information on the telephone number of the calling party comprises originating station data, whereby a type of originating station for a caller-paid telephone call is identified.

15. The system of claim 7, wherein the interexchange network comprises a plurality of interexchange networks and the local exchange network comprises a plurality of local exchange networks.

16. A method of routing caller-paid and toll-free telephone calls directed to a call service in system for routing both toll-free and caller-paid telephone calls, the system comprising a call service having a plurality of call service centers, an interexchange network for handling toll-free telephone calls directed to the call service, a local exchange network for handling caller-paid telephone calls directed to the call service, the local exchange network having a call controller, and a call routing processor in communication with the call service centers, the interexchange network, and the local exchange network, the call routing processor configured to receive status messages from the call service centers and provide routing instructions to the interexchange network and the local exchange network, the method comprising the steps of:

receiving a caller-paid telephone call at a switch in the local exchange network;

identifying that the caller-paid call is a call directed to a call service;

requesting call routing instructions from the call routing processor; and

routing the caller-paid telephone call according to the call routing instructions received from the call routing processor.

17. The method of claim 16, wherein the step of requesting call routing instructions comprises examining service logic in a call routing processor interface for instructions on handling telephone calls to a particular call service, executing the instructions and sending a routing query message to the call routing processor.

18. The method of claim 17, wherein the step of executing the instructions comprises the steps of playing a message to a caller and collecting at least one digit entered by the caller in response to the message, and wherein the step of sending a routing query message comprises sending the at least one collected digit to the call routing processor.

19. The method of claim 17, wherein the local exchange network further comprises a switch in communication with the call controller, and wherein the step of executing the instructions comprises the steps of the call controller instructing the switch to play a message and collect at least one digit entered by a user in response to the message, and the switch communicating the at least one digit to the call controller.

20. The method of claim 17, wherein the local exchange network further comprises a switch in communication with the call controller, and an intelligent peripheral in communication with the switch, wherein the step of executing the instructions comprises the steps of the call controller instructing the intelligent peripheral to play a message and collect at least one digit entered by a user in response to the message, and the intelligent peripheral communicating the at least one digit to the call controller.

21. The method of claim 16, further comprising the step of the call controller requesting subsequent call routing instructions from the call routing processor if the routed caller-paid call encounters a busy signal.

